

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/560494 E
Source: IFW16
Date Processed by STIC: 5/12/05

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 05/12/2005

PATENT APPLICATION: US/09/560,494E

TIME: 10:47:03

Input Set : A:\102286-413.ST25.txt

Output Set: N:\CRF4\05122005\I560494E.raw

```

4 <110> APPLICANT: Jakobsen, Brent Karsten
5      Gao, George Fu
6      Gerth, Ulrich Conrad
7      Sewell, Andrew Kelvin
9 <120> TITLE OF INVENTION: CD8 AS AN INHIBITOR OF THE CELLULAR IMMUNE SYSTEM
11 <130> FILE REFERENCE: 102286.413
13 <140> CURRENT APPLICATION NUMBER: US 09/560,494E
14 <141> CURRENT FILING DATE: 2000-04-28
16 <150> PRIOR APPLICATION NUMBER: PCT/GB98/03235
17 <151> PRIOR FILING DATE: 1998-10-28
19 <150> PRIOR APPLICATION NUMBER: GB 9722779.7
20 <151> PRIOR FILING DATE: 1997-10-28
22 <160> NUMBER OF SEQ ID NOS: 32
24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 48
28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial Sequence
31 <220> FEATURE:
32 <223> OTHER INFORMATION: Synthetic DNA primer
34 <400> SEQUENCE: 1
35 gactgagtcg cggccgctgc caccatggcc ttaccagtga ccgccttg          48
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 42
39 <212> TYPE: DNA
40 <213> ORGANISM: Artificial Sequence
42 <220> FEATURE:
43 <223> OTHER INFORMATION: Synthetic DNA primer
45 <400> SEQUENCE: 2
46 tattcgactg gatccttata cgtatctcgc cgaaaggctg gg              42
48 <210> SEQ ID NO: 3
49 <211> LENGTH: 42
50 <212> TYPE: DNA
51 <213> ORGANISM: Artificial Sequence
53 <220> FEATURE:
54 <223> OTHER INFORMATION: Synthetic DNA primer
56 <400> SEQUENCE: 3
57 ggaattccat atgagccagt tccgggtgtc gccgctggat cg              42
59 <210> SEQ ID NO: 4
60 <211> LENGTH: 54
61 <212> TYPE: DNA
62 <213> ORGANISM: Artificial Sequence
64 <220> FEATURE:

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65 <223> OTHER INFORMATION: Synthetic DNA primer
67 <400> SEQUENCE: 4
68 cgcggatccc tatgcgcccc ccgctggccg gctcgctctt gggcgaggg acag      54
70 <210> SEQ ID NO: 5
71 <211> LENGTH: 60
72 <212> TYPE: DNA
73 <213> ORGANISM: Artificial Sequence
75 <220> FEATURE:
76 <223> OTHER INFORMATION: Synthetic DNA primer
78 <400> SEQUENCE: 5
79 caccgcgaat tcggatccta agcgggtcta caagcttcgg gcttcgctgg caggaagacc 60
82 <210> SEQ ID NO: 6
83 <211> LENGTH: 59
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Synthetic DNA primer
90 <400> SEQUENCE: 6
91 caccgcgaat tcggatccta agcgggtcta caagcttctg gcgtcgtggg gggcttcgc 59
93 <210> SEQ ID NO: 7
94 <211> LENGTH: 60
95 <212> TYPE: DNA
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: Synthetic DNA primer
101 <400> SEQUENCE: 7
102 caccgcgaat tcggatccta agcgggtcta caagcttcgg gcttcgctgg caggaagacc 60
105 <210> SEQ ID NO: 8
106 <211> LENGTH: 42
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: Synthetic DNA primer
113 <400> SEQUENCE: 8
114 gtggcaagct tggatcctat ggcgtcgtgg tgggcttcgc tg      42
116 <210> SEQ ID NO: 9
117 <211> LENGTH: 42
118 <212> TYPE: DNA
119 <213> ORGANISM: Artificial Sequence
121 <220> FEATURE:
122 <223> OTHER INFORMATION: Synthetic DNA primer
124 <400> SEQUENCE: 9
125 ggaattccat atgagtcaat ttcgtgtatc accgctggat cg      42
127 <210> SEQ ID NO: 10
128 <211> LENGTH: 35
129 <212> TYPE: DNA
130 <213> ORGANISM: Artificial Sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: Synthetic DNA primer

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135 <400> SEQUENCE: 10
136 acatacccat gggctctcac tccatgaggt atttc 35
138 <210> SEQ ID NO: 11
139 <211> LENGTH: 43
140 <212> TYPE: DNA
141 <213> ORGANISM: Artificial Sequence
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Synthetic DNA primer
146 <400> SEQUENCE: 11
147 acatacaagc ttacggctcc catcttaagg tgaggggctt ggg 43
149 <210> SEQ ID NO: 12
150 <211> LENGTH: 9
151 <212> TYPE: PRT
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: HLA-A2 Pol-restricted CTL line specific peptide
157 <400> SEQUENCE: 12
158 Ile Leu Lys Glu Pro Val His Gly Val
159 1 5
162 <210> SEQ ID NO: 13
163 <211> LENGTH: 9
164 <212> TYPE: PRT
165 <213> ORGANISM: Artificial Sequence
167 <220> FEATURE:
168 <223> OTHER INFORMATION: HLA-A2 Pol-restricted CTL line specific peptide
170 <400> SEQUENCE: 13
171 Ser Leu Tyr Asn Thr Val Ala Thr Leu
172 1 5
175 <210> SEQ ID NO: 14
176 <211> LENGTH: 9
177 <212> TYPE: PRT
178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: HLA-A2 Pol-restricted CTL line specific peptide
183 <400> SEQUENCE: 14
184 Val Ile Tyr Gln Tyr Met Asp Asp Leu
185 1 5
188 <210> SEQ ID NO: 15
189 <211> LENGTH: 42
190 <212> TYPE: DNA
191 <213> ORGANISM: Artificial Sequence
193 <220> FEATURE:
194 <223> OTHER INFORMATION: Synthetic DNA primer
196 <400> SEQUENCE: 15
197 ctgtccaacc cgacgtcggg cagctcgtgg ctcttccagc cg 42
199 <210> SEQ ID NO: 16
200 <211> LENGTH: 42
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial Sequence

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204 <220> FEATURE:
205 <223> OTHER INFORMATION: Synthetic DNA primer
207 <400> SEQUENCE: 16
208 cggctggaag agccacgagc tgcccgcacgt cgggttggac ag 42
210 <210> SEQ ID NO: 17
211 <211> LENGTH: 99
212 <212> TYPE: DNA
213 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: Synthetic DNA primer
218 <400> SEQUENCE: 17
219 gggggaagct taatgccatt cgattttctg agcttcaaaa atatcggtca gaccaccacc 60
220 ggatcctggc gtcgtggtgg gcttcgctgg caggaagac 99
222 <210> SEQ ID NO: 18
223 <211> LENGTH: 18
224 <212> TYPE: PRT
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: CD8 alpha polypeptide
230 <400> SEQUENCE: 18
231 Gly Ser Gly Gly Gly Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu
232 1 5 10 15
233 Trp His
237 <210> SEQ ID NO: 19
238 <211> LENGTH: 63
239 <212> TYPE: DNA
240 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Synthetic DNA primer
245 <400> SEQUENCE: 19
246 gaggaggagc atatgaaacc acaagcacct gaactacgaa tctttccaaa gaaaatggac 60
247 gcc 63
249 <210> SEQ ID NO: 20
250 <211> LENGTH: 36
251 <212> TYPE: DNA
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: synthetic DNA primer
257 <400> SEQUENCE: 20
258 ggggagggaa gcttacttgg tagtagtaga gtccac 36
260 <210> SEQ ID NO: 21
261 <211> LENGTH: 9
262 <212> TYPE: PRT
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: HLA-A2-flu
268 <400> SEQUENCE: 21
269 Gly Ile Leu Gly Phe Val Phe Thr Leu
270 1 5

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Input Set : A:\102286-413.ST25.txt

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273 <210> SEQ ID NO: 22
274 <211> LENGTH: 9
275 <212> TYPE: PRT
276 <213> ORGANISM: Artificial Sequence
278 <220> FEATURE:
279 <223> OTHER INFORMATION: peptide epitope
281 <400> SEQUENCE: 22
282 Lys Ala Val Tyr Asn Phe Ala Thr Cys
283 1 5
286 <210> SEQ ID NO: 23
287 <211> LENGTH: 366
288 <212> TYPE: DNA
289 <213> ORGANISM: Artificial Sequence
291 <220> FEATURE:
292 <223> OTHER INFORMATION: synthetic DNA construct encoding part of the
293 extracellular domain of human CD8 alpha
W--> 295 <221> NAME/KEY: CDS
296 <222> LOCATION: (1)...(366)
W--> 298 <400> 23
299 atg agt caa ttt cgt gta tca ccg ctg gat cgg acc tgg aac ctg ggc 48
300 Met Ser Gln Phe Arg Val Ser Pro Leu Asp Arg Thr Trp Asn Leu Gly
301 1 5 10 15
303 gag aca gtg gag ctg aag tgc cag gtg ctg ctg tcc aac ccg acg tcg 96
304 Glu Thr Val Glu Leu Lys Cys Gln Val Leu Leu Ser Asn Pro Thr Ser
305 20 25 30
307 ggc tgc tcg tgg ctc ttc cag ccg cgc ggc gcc gcc gcc agt ccc acc 144
308 Gly Cys Ser Trp Leu Phe Gln Pro Arg Gly Ala Ala Ala Ser Pro Thr
309 35 40 45
311 ttc ctc cta tac ctc tcc caa aac aag ccc aag gcg gcc gag ggg ctg 192
312 Phe Leu Leu Tyr Leu Ser Gln Asn Lys Pro Lys Ala Ala Glu Gly Leu
313 50 55 60
315 gac acc cag cgg ttc tcg ggc aag agg ttg ggg gac acc ttc gtc ctc 240
316 Asp Thr Gln Arg Phe Ser Gly Lys Arg Leu Gly Asp Thr Phe Val Leu
317 65 70 75 80
319 acc ctg agc gac ttc cgc cga gag aac gag ggc tac tat ttc tgc tcg 288
320 Thr Leu Ser Asp Phe Arg Arg Glu Asn Glu Gly Tyr Tyr Phe Cys Ser
321 85 90 95
323 gcc ctg agc aac tcc atc atg tac ttc agc cac ttc gtg ccg gtc ttc 336
324 Ala Leu Ser Asn Ser Ile Met Tyr Phe Ser His Phe Val Pro Val Phe
325 100 105 110
327 ctg cca gcg aag ccc acc acg acg cca tag 366
328 Leu Pro Ala Lys Pro Thr Thr Thr Pro *
329 115 120
332 <210> SEQ ID NO: 24
333 <211> LENGTH: 121
334 <212> TYPE: PRT
335 <213> ORGANISM: Artificial Sequence
337 <220> FEATURE:
338 <223> OTHER INFORMATION: an amino acid construct encoding part of the

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VERIFICATION SUMMARY

DATE: 05/12/2005

PATENT APPLICATION: US/09/560,494E

TIME: 10:47:04

Input Set : A:\102286-413.ST25.txt

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L:295 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:298 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23
L:369 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:372 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:25
L:478 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:29
L:585 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:588 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:31